

Appl. No. 10/028,245
Amdt. dated March 21, 2004
Reply to Office Action of January 21, 2004

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REMARKS

The Invention.

The present invention provides a novel endoglucanase nucleic acid sequence, designated *egl8*, and the corresponding EGVIII amino acid sequence. The invention also provides expression vectors and host cells comprising a nucleic acid sequence encoding EGVIII, recombinant EGVIII proteins and methods for producing the same.

Status of the Application.

Claims 1-17, 19-20, 22-24, and 26 are pending in the application. Claim 1 has been cancelled herein without prejudice. Claims 2 and 26 have been amended herein to clarify what Applicants consider the subject matter of the invention. No new matter is introduced by these amendments.

Specification.

The disclosure was objected to as containing an embedded hyperlink and/or other form of browser-executable code. Applicants have amended the specification to remove the hyperlinks. Withdrawal of the objection is respectfully requested.

35 U.S.C. §112, first paragraph.

Claims 1-17, 19-20, 22 and 26

Claims 1-17, 19-20, 22 and 26 stand rejected under 35 USC §112, first paragraph as failing to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims. By the present amendments the instant rejection is rendered moot. Withdrawal is respectfully requested.

Claims 1-17, 19-20, 22 and 26

Claims 1-17, 19-20, 22 and 26 stand rejected under 35 USC §112, first paragraph as allegedly containing subject which was not described in the specification in such a way as to convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. By the present

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amendments the instant rejection is rendered moot. Withdrawal is respectfully requested.

35 U.S.C. §112, second paragraph.

Claim 2 and claims dependent therefrom as failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the Examiner asserts that Claim 2 is confusing due to the recitation of "Figure 2 (SEQ ID NO:2)".

Applicants have amended Claim 2 to clarify what Applicants believe is the invention. Withdrawal of the rejection is respectfully requested.

35 U.S.C. §103.

Initially, Applicant notes that the test for non-obviousness articulated by the Court of Appeals for the Federal Circuit requires that the combination of the teachings of all or any of the references would have suggested the possibility of further improvement by combining such teachings. Thus, the test of whether it would have been obvious to select specific teachings and combine them must still be met by identification of some suggestion, teaching, or motivation in the prior art, arising from what the prior art would have taught a person of ordinary skill in the field of the invention. See *In re Dance*, 160 F.3d 1339, 48 USPQ2d 1635 quoting *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988), and *In re Vaack*, 20 USPQ2d 1439 (Fed. Cir. 1991).

Claims 1, 6 and 7

The Examiner has rejected Claim 26 as being unpatentable over Bhikhabhai *et al.* (J. Appl. Biochem. (1984) 6:336-345) and Okada, *et al.* (Appl. Environ. Microbiol. (1998) 64(2):555-563). Specifically, the Examiner asserts that the EG II of Bhikhabhai *et al.* and the instant endoglucanase, referred to by Applicants as EG VIII, are one and the same. Applicants respectfully traverse the rejection.

Applicants have performed a BLAST search of the non-redundant protein database, conducted on September 12, 2001 with the EGVIII amino acid sequence indicated 52% identity with GenBank Accession Number AB021657 (endoglucanase II

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of *Trichoderma viride*), 51% sequence identity to GenBank Accession Number M19373 (endoglucanase EG-II precursor of *Trichoderma reesei*). See Specification at page 24, lines 15-24. That alone would indicate the two proteins are different.

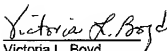
The present EG VIII has an N-terminal sequence of Gly-Lys-Ile whereas the EG II of Bhikhabhai has an N-terminal sequence of Glu-Pro-Gly. See Table I of Bhikhabhai on page 343. Furthermore, the sequence Glu-Pro-Gly is not found in Applicants EG VIII. Thus, Applicants assert that the two proteins are not one and the same and that the skilled artisan would not combine the references.

Therefore, Applicants respectfully request that this rejection be withdrawn and the Claims be passed to allowance.

CONCLUSION

In light of the above amendments, as well as the remarks, the Applicants believe the pending claims are in condition for allowance and issuance of a formal Notice of Allowance at an early date is respectfully requested. If a telephone conference would expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (650) 846-7516.

Respectfully submitted,



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